CALIFORNIA STATE DEPARTMENT OF PUBLIC HEALTH
WALTER M. DICKIE, M.D., Director

Weekly Bulletin

STATE BOARD OF PUBLIC HEALTH
GEORGE E. EBRIGHT, M.D., President FRED F. GUNDRUM, M.D., Vice President
A. J. SCOTT, Jr., M.D. ADELAIDE BROWN, M.D. EDWARD F. GLASER, M.D.
ROBERT A. PEERS, M.D. WALTER M. DICKIE, M.D.

Entered as second-class matter February 21, 1922, at the post office at Sacramento, California, under the Act of August 24, 1912.
Acceptance for mailing at special rate of postage provided for in Section 1103, Act of October 3, 1917.

Vol. IX, No. 20 June 21, 1930 GUY P. JONES EDITOR

Prevention and Treatment of Poison Oak

Poison ivy and poison oak are close relatives and are similar in their poisonous properties. Their poisonous principle is a nonvolatile, oily substance known as toxicodendrol, which has such violently irritant properties that the slightest trace deposited on the skin is capable of producing severe inflammation. All parts of the plant contain the poison, even after long drying, but growth in which the sap is abundant is the most dangerous.

Poisoning is usually caused by touching or brushing against the plants or by handling clothing or other articles that have been in contact with them. On the other hand, many persons are convinced that they have been poisoned by particles carried through the air, when passing by the plants or observing them from a short distance, without actually touching them. There is much difference of opinion and conflicting evidence on this point. Many sensitive individuals find that they are fully protected by avoiding actual contact with the plants or with articles contaminated with the poison. It is well known, however, that smoke from the burning plants will carry the poison and may cause serious injury.

Many persons believe themselves immune to poison oak and seem to be able to handle the plants freely without harm. Experience and experiments seem to show, however, that complete immunity to ivy poisoning does not exist, and many supposedly immune persons have not only been poisoned by carelessly handling the plants, but afterwards have suffered attacks on the slightest exposure.

Taken internally in sufficient dose, the plant is a violent irritant poison. Cases have been reported of children who have been poisoned by eating the ripe fruits.

The symptoms of poison oak are produced as the irritant poison penetrates the outer surface of the skin, and they may appear within a few hours or be delayed until five days or longer after exposure. Itching or burning sensations, with reddening of the poisoned surfaces and more or less swelling, are first noticed, usually followed by the appearance of small vesicles, which may show a tendency to run together and form blisters. Pus may form in these vesicles, followed by the formation of a crust or scab as the eruption dries. The acute symptoms of the attack usually continue to develop for a day or two, followed by gradual improvement as the effects of the irritant wear off.

PREVENTION

Those who are sensitive to this poisoning should not only avoid touching the plants, but also should use care in handling articles which may have been in contact with them. Contaminated shoes, clothing, or tools are sources of poisoning sometimes overlooked, as are also animals that have access to poison oak.

While poison oak is sometimes so abundant as to make complete eradication practically impossible, plants occurring along paths and in frequented situations should be destroyed.

After exposure to poison ivy, measures to insure the removal of the poison are of primary importance. It

should be remembered that at first the poison is on the surface of the skin and can be removed by thorough washing and rinsing repeated several times. Careless washing, however, may serve to spread the poison. Ordinary kitchen or laundry soap which has an excess of alkali is best for the purpose, and hot water should be used. The soap should be applied freely, so as to produce an abundant, heavy lather on the exposed surfaces, then rinsed off completely, and the operation repeated not less than three or four times. Running water is preferable, but if a basin is used the water should be changed frequently. The hands, especially the finger nails, should receive particular attention, in order to remove traces of the poison which they may harbor and transfer to other parts of the body. Special attention should be paid to the tender skin between the fingers. Hard scrubbing with a stiff brush is not advised, as it may serve to rub in the poison and stir up infection; but there is no objection to wash rags, provided several are used and each discarded in turn. The poison can also be removed by cleansing the exposed parts repeatedly with alcohol diluted with an equal quantity of water. Alcohol merely dissolves the poison and unless applied with caution, insuring the complete removal, will spread it over wide areas. The alcohol may be dabbed on with a piece of absorbent cotton, promptly removing it with a dry piece, discarding each piece of cotton as used, repeating the procedure a number of times.

Some of the salts of iron which have a neutralizing effect on the poison are reported* to have been used with good results as preventives. A solution of five parts of ferric chloride in 95 parts of a half-and-half mixture of water and glycerin, also a solution of one part of ferrous sulphate in five parts of water, have been recommended as local applications for this purpose. Either of these solutions may be applied freely to the exposed parts of the body and allowed to dry there before going into a region where contact with poison oak is probable. Such solutions are also of much benefit if they are used as soon as possible after there has been actual contact with the plant.

REMEDIES

Mild cases of this poisoning usually subside within a few days, and do not cause alarm, but fatal cases have occurred. When the inflammation is extensive or severe, a physician should be consulted. Since the inflammation may continue to develop for several days, while the irritant is being slowly absorbed into the tender layers of the skin, it is not surprising that remedies tried in the early stages may prove disappointing. If they are discarded in favor of some other remedy just as the poison becomes exhausted, the rapid improvement then noted may cause the last remedy to be regarded as a sure cure.

Thorough washing, in the manner described as a preventive, should be tried even after the inflammation has developed, in order to remove from exposed surfaces of the skin all traces of the poison that can still be reached.

A five per cent solution of potassium permanganate applied locally is reported to be a very good remedy. The brown stain caused by this solution will gradually wash off, or it may be removed more rapidly with lemon juice or with a one per cent solution of sodium bisulphite.

For the inflammation, simple remedies, such as local applications of solutions of cooking soda or of Epsom salt, one or two heaping teaspoons to a cup of water, are ordinarily as helpful as any. Fluid extract of grindelia, diluted with four to eight parts of water, is often used. Solutions of this kind may be applied with light bandages or clean cloths, which should be kept moist and should also be changed and discarded frequently in order to avoid infection. During the night, or when moist applications can not be used, the poisoned surfaces should be carefully cleaned and dried and left exposed to the air rather than tightly bandaged. Immersing the poisoned parts for several minutes in water as hot as can be borne, or applying hot towels where this is impracticable, is much recommended for the itching. This measure increases the discomfort at the moment of application, but it is followed by a period of great relief. In the early stages remedies with a fatty or oily base, such as ointments, should not be used, as grease or oil tends to dissolve and spread the poison. In the later stage, after the toxic material has exhausted itself, zinc-oxide ointment and similar mild antiseptic and astringent applications hasten healing.

A simple formula useful at both the late and early stages is the following, which may be dabbed on the poisoned parts after a thorough cleansing or applied by saturating one or two thicknesses of light bandage:

Zinc oxide	15 grams
Phenol	2 grams
Lime water to make	250 cubic centimeters

The above information is abstracted from publications of the United States Department of Agriculture.

* Interest in the use of iron salts for the prevention of ivy poisoning and of permanganate of potash as a remedy has been increased by recent experiments of J. B. McNair, Field Museum, Chicago; George D. Fuller, University of Chicago; and J. F. Couch, Bureau of Animal Industry, U. S. Department of Agriculture. Results and recommendations were published in an article in the Literary Digest, as follows: THONE, F. Iron-Treatment for Poison Ivy. Lit. Digest 90 (4): 22–23, illus. 1926.

NORTHERN CALIFORNIA PUBLIC HEALTH WORKERS TO MEET

The summer meeting of the Northern California Public Health Association will be held in Berkeley, June 28, 1930. Dr. Frank Kelly, city health officer of Berkeley, will hold open house at the office of the Berkeley Department of Public Health, Allston Way and McKinley streets, from 3 to 4 p.m. Dr. W. H. Kellogg, chief of the State Bacteriological Laboratory, will keep open house from 4.30 to 6 p.m. Dr. Kellogg will conduct demonstrations in public health procedures. Dr. John Sundwall of the School of Hygiene of the University of Michigan, who is at the summer session of the University of California, will be present and will act as a counsellor to all members of the association who may desire individual conferences upon public health problems. Dr. Frederic H. Allen, director of the State Mental Hygiene Survey; Dr. Ina M. Richter, director of the Heart Clinic of the San Francisco Board of Health; Dr. Adelaide Brown and Dr. Ellen S. Stadtmuller of the Bureau of Child Hygiene of the State Department of Public Health will also be available for conferences. Members of the association who desire to take advantage of the opportunity to consult these experts should make arrangements for definite appointments through the secretary of the association, Dr. Walter H. Brown, Department of Physical Education, Stanford University, California.

The regular dinner will be held at the Women's Faculty Club at 6.30 p.m. Places are limited to 125. The speakers of the evening will be: Dr. Frederic H. Allen, Dr. John Sundwall, Dr. Ina M. Richter. The complete program follows:

SUMMER MEETING
of the
NORTHERN CALIFORNIA PUBLIC HEALTH ASSOCIATION
Berkeley, June 28, 1930

3.00 to 4.00 p.m.—*Berkeley Department of Health, Allston and McKinley Streets.*

Open house, under direction of Dr. Frank Kelly, Health Officer.

4.30 to 6.00 p.m.—*Life Sciences Building, University of California Campus.*

Demonstrations of Public Health Procedures. Dr. W. H. Kellogg, Chief California State Bacteriological Laboratory.

Individual Conferences, arranged by appointment through Secretary of N. C. P. H. A. Drs. Sundwall, Allen, Richter.

6.30 to 7.30 p.m.—*Women's Faculty Clubhouse, 2200 College Avenue.*

Dinner. Cards for reservations enclosed with program.

PROGRAM

"The Relation of the Public Health Nurse to the Mental Hygiene Survey of California."—Fred H. Allen, M.D., Director of Survey.

"The Relation of the Public Health Nurse to the School Health Program."—John Sundwall, M.D., Director, School of Hygiene, University of Michigan.

"Study of the Incidence and Variety of Heart Lesions in the School Children of San Francisco."—Ina M. Richter, M.D., Director, Cardiac Center, San Francisco.

SUMMER CAMPS MUST BE MADE SANITARY

Each year finds more children in summer camps located in many recreational districts of California. Unless such summer camps are conducted properly, they may not provide the beneficent health effects for which they are designed. In too many such camps there is a lack of any direct precautions to safeguard children's health. If children in these camps do not contract communicable diseases, it is due more often to good luck or immunity than to the enforcement of preventive measures. Official routine inspections by competent individuals would accomplish much in checking the spread of communicable diseases in children's camps. Lack of proper supervision over camp activities may result in a loss of health rather than the gain that might be expected. Parents who send their children to summer camps should be assured that every possible provision for the safeguarding of health is present. To send any child to any camp where such provisions are not made might be a very expensive and disastrous procedure.

MORBIDITY*

Diphtheria.

44 cases of diphtheria have been reported, as follows: Oakland 3, Los Angeles County 3, Glendale 2, Los Angeles 9, Redondo 1, Santa Monica 1, Hawthorne 2, Monterey Park 1, Brea 1, Santa Ana 1, Placentia 1, Riverside 3, Sacramento 1, San Bernardino County 1, San Francisco 8, Santa Clara County 1, Santa Clara 2, Tulare County 2, Tuolumne County 1.

Scarlet Fever.

112 cases of scarlet fever have been reported, as follows: Oakland 10, Contra Costa County 4, Richmond 1, Fresno County 1, Fresno 3, Los Angeles County 3, Glendale 4, Huntington Park 1, Long Beach 2, Los Angeles 23, Pomona 2, Santa Monica 1, Whittier 2, South Gate 2, Marin County 2, Napa County 1, Orange County 1, Santa Ana 1, Sacramento County 1, Sacramento 3, Chula Vista 1, San Diego 1, San Francisco 15, San Joaquin County 7, San Mateo County 1, San Bruno 1, Los Gatos 1, Palo Alto 5, Sonoma County 1, Modesto 2, Tehama County 4, Woodland 1, Marysville 4.

Measles.

1470 cases of measles have been reported, as follows: Alameda County 14, Alameda 3, Berkeley 44, Hayward 1, Oakland 33, Contra Costa County 10, Concord 1, Martinez 6, Pittsburg 4, Richmond 2, Fresno County 12, Fresno 11, Kern County 8, Hanford 8, Los Angeles County 147, Alhambra 28, Arcadia 1, Avalon 2, Beverly Hills 4, Claremont 3, Compton 13, Culver City 5, El Monte 1, El Segundo 35, Glendale 19, Huntington Park 43, Inglewood 16, La Verne 1, Long Beach 79, Los Angeles 235, Manhattan 1, Monrovia 1, Pomona 5, Redondo 5, San Fernando 2, San Gabriel 11, Santa Monica 21, Vernon 1, Whittier 20, Torrance 14, Lynwood 3, Hawthorne 5, South

* From reports received on June 16th and 17th for week ending June 14th.

Gate 9, Monterey Park 6, Maywood 1, Bell 11, Yosemite 1, Gustine 1, Los Banos 4, Merced 12, Soledad 1, Orange County 23, Anaheim 17, Brea 1, Fullerton 11, Newport Beach 1, Santa Ana 27, La Habra 2, Placentia 3, Plumas County 1, Riverside County 26, Corona 4, Perris 1, Riverside 29, Sacramento County 8, Sacramento 19, San Bernardino County 4, Ontario 23, San Bernardino 10, Upland 6, San Diego County 27, Coronado 3, National City 1, Oceanside 5, San Diego 88, San Francisco 53, San Joaquin County 21, Stockton 41, San Bruno 1, Santa Clara County 41, Los Gatos 2, Palo Alto 8, San Jose 3, Watsonville 3, Sonoma County 2, Stanislaus County 2, Tulare County 7, Dinuba 11, Exeter 1, Visalia 3, Tuolumne County 1, Yolo County 5, Woodland 1.

Smallpox.

31 cases of smallpox have been reported, as follows: Oakland 1, Kern County 2, Los Angeles County 5, Inglewood 1, Los Angeles 6, Torrance 3, Riverside County 1, Sacramento 5, San Bernardino County 2, Tracy 1, Dunsmuir 1, Modesto 1, Tulare County 2.

Typhoid Fever.

16 cases of typhoid fever have been reported, as follows: Oakland 2, Calexico 1, Los Angeles County 1, Long Beach 2, Los Angeles 2, Riverside County 3, Riverside 2, Ontario 1, San Francisco 2.

Whooping Cough.

199 cases of whooping cough have been reported, as follows: Alameda 2, Albany 1, Berkeley 1, Oakland 16, Martinez 2, Fresno County 4, Fresno 13, Los Angeles County 31, Beverly Hills 2, Glendale 1, Hermosa 1, Huntington Park 1, Inglewood 2, Long Beach 10, Los Angeles 28, Lynwood 2, Hawthorne 7, South Gate 1, Maywood 1, Bell 5, Orange County 2, Anaheim 7, Fullerton 4, Newport Beach 1, Orange 3, Placentia 1, Riverside 3, Sacramento 1, San Bernardino County 1, San Bernardino 1, San Diego County 3, Oceanside 2, San Diego 15, San Francisco 2, San Joaquin County 1, Stockton 3, Stanislaus County 2, Tulare County 8, Dinuba 8.

Poliomyelitis.

36 cases of poliomyelitis have been reported, as follows: Reedley 1, Hanford 1, Los Angeles County 2, Beverly Hills 1, El Monte 1, Inglewood 1, Los Angeles 16, Monrovia 1, Pomona 1, South Gate 1, Orange County 2, Placentia 1, Riverside 2, San Bernardino County 1, San Bernardino 1, National City 1, San Diego 2.

Meningitis (Epidemic).

4 cases of epidemic meningitis have been reported, as follows: Los Angeles County 1, Anaheim 1, Sacramento 1, San Mateo County 1.

Food Poisoning.

8 cases of food poisoning have been reported, as follows: Los Angeles County 7, Placentia 1.

Undulant Fever.

5 cases of undulant fever have been reported, as follows: Los Angeles County 1, Glendale 1, Los Angeles 1, Redondo 1, Riverside County 1.

Anthrax.

Kings County reported one case of anthrax.

NOTE.—Cases charged to "California" represent patients ill before entering the state or those who contracted their illness traveling about the state throughout the incubation period of the disease. These cases are not chargeable to any one locality.

COMMUNICABLE DISEASE REPORTS

Disease	1930 Week ending May 24	1930 Week ending May 31	1930 Week ending June 7	1930 Reports for week ending June 14 received by June 17	1929 Week ending May 25	1929 Week ending June 1	1929 Week ending June 8	1929 Reports for week ending June 15 received by June 18
Anthrax	0	0	0	1	0	0	0	0
Chickenpox	301	354	323	249	497	438	496	308
Coccidioidal Granuloma	1	0	0	0	2	2	0	0
Diptheria	58	58	60	44	54	61	44	39
Dysentery (Amoebic)	3	0	1	1	3	1	0	0
Dysentery (Bacillary)	0	2	2	0	0	2	1	5
Encephalitis (Epidemic)	1	2	2	0	2	7	1	0
Erysipelas	8	8	11	13	21	24	23	10
Food Poisoning	3	3	0	8	0	6	0	3
German Measles	9	15	19	8	31	33	24	14
Gonococcus Infection	91	93	168	108	95	56	91	105
Hookworm	1	0	0	0	0	0	0	1
Influenza	9	21	21	13	34	16	25	18
Leprosy	0	1	0	0	0	0	0	0
Malaria	2	0	1	0	1	1	2	2
Measles	2,297	2,159	2,030	1,470	148	140	129	111
Meningitis (Epidemic)	3	5	6	4	22	21	12	9
Mumps	683	621	585	458	638	438	489	378
Ophthalmia Neonatorum	0	1	0	0	1	1	1	1
Paratyphoid Fever	1	0	0	4	0	0	0	0
Pellagra	2	2	0	4	2	1	1	1
Pneumonia (Lobar)	45	35	49	43	49	91	55	29
Poliomyelitis	13	17	32	36	3	3	3	4
Rabies (Animal)	13	9	20	19	17	18	14	14
Rocky Mt. Spotted Fever	0	0	1	0	0	0	3	0
Scarlet Fever	128	117	122	112	457	340	458	326
Smallpox	78	50	49	31	67	47	30	45
Syphilis	135	106	270	128	178	97	118	227
Tetanus	1	0	3	0	2	1	2	0
Trachoma	1	2	4	0	4	0	0	0
Trichinosis	0	2	1	0	0	0	0	0
Tuberculosis	237	264	224	177	257	169	239	154
Tularemia	0	3	2	0	1	0	0	0
Typhoid Fever	19	14	11	16	7	8	9	7
Undulant Fever	2	1	3	5	0	4	1	2
Whooping Cough	260	251	228	199	341	267	252	190
Totals	4,405	4,216	4,248	3,151	2,934	2,293	2,523	2,003

Epidemic poliomyelitis is causing uneasiness.

Measles dropped one-third in its prevalence last week.

Most of the reportable diseases have diminished in numbers reported.

Rabies in animals is rather extensive in distribution.

75463 6-30 5300 CALIFORNIA STATE PRINTING OFFICE